



water



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Application of UV Technologies in Water and Wastewater Treatment

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Message from the Guest Editors

Ultraviolet (UV) technologies have been widely applied to water and wastewater disinfection due to their high sterilization efficiency and property of no disinfection byproduct (DBP) generation. In addition, UV-based advanced oxidation processes (AOPs) have also become a hot issue in water treatment. The strong oxidizing radicals produced during UV-based AOPs can accelerate both microbial inactivation and pollutant degradation. UV technologies have been proved to have many advantages in water and wastewater treatment, but identifying how to use it efficiently and safely remains to be further studied. At present, low- and medium-pressure UV mercury lamps are still the most commonly used UV sources in water plants. Therefore, it is worth exploring whether the introduction of these new UV light sources will make a difference in water and wastewater treatment. This Special Issue is devoted to the application of different UV technologies in water and wastewater treatment, including the improvement of traditional UV technologies and the development of novel UV light sources, as well as water security during UV treatment.



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Special issue



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